

Copy

FIGURE 1 - Pervasive Commerce System

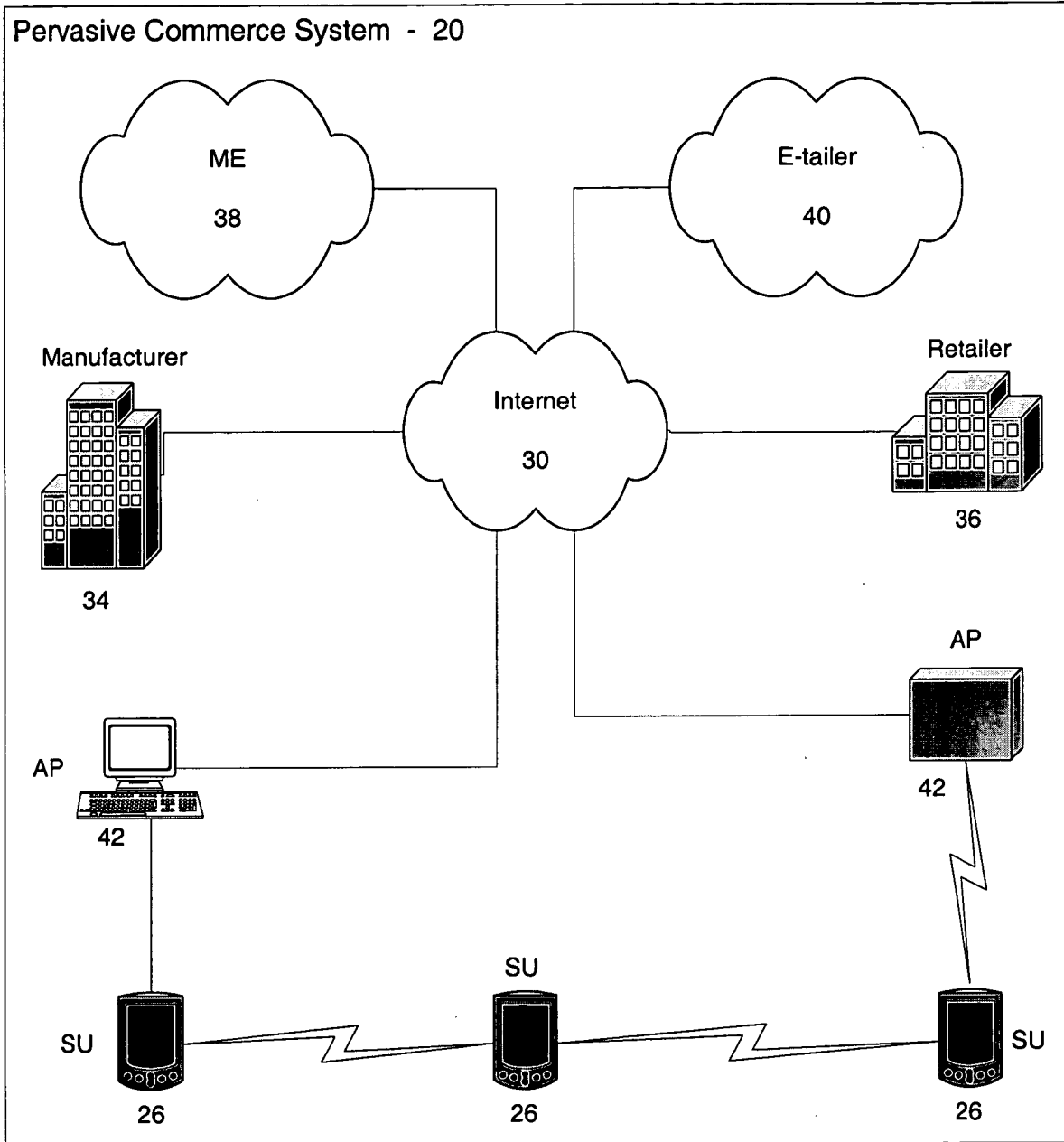


FIG. 1 is a block diagram of a Pervasive Commerce System.

FIGURE 2 - Generic Case Structure

Item Data Block ("T" Block)	
Case Information	ID, version, etc., for the entire case.
Link Information	Relationship to other cases.
Item Information	ID, name, description, etc., for the item.
ME Public Key	Case key or ME key version, used for encryption and whose private key peer is used in "T" and "O" Block signatures.
Distributor Public Key	Assigned to or received from Distributor; private key is used in "D" Block signature.
Block Signature	ME signature of "T" Block

Object Block ("O" Block)	
Object Information	ID, type, description, encoding, size, etc., for the contained digital object.
Object	Image, music, digital asset, etc.
Block Signature	ME signature of "O" Block (via private key peer to ME Public Key).

Distributor Data Block ("D" Block)	
Distributor Information	ID, name, information, etc., for Distributor.
Item Information	Encrypted wholesale price, etc., of item.
Item Options	Selectable features and options of item.
Mutation Rules	Controlling application behavior for case mutation (e.g., expiration date).
Passer Public Key	Assigned to or received from Passer, whose private peer is used in "P" Block signature.
Block Signature	Distributor signature of "D" Block (via private key peer to Distributor Public Key).

Passer Data Block ("P" Block)	
Passer Information	ID, name, etc., of Passer.
Item Information	Sales price, comments, etc., about item.
Receiver Public Key	Assigned to or received from Receiver.
Block Signature	Passer signature of "P" Block (via private key peer to Passer Public Key).

Receiver Data Block ("R" Block)	
Receiver Information	ID, name, etc., of Receiver.
Block Signature	Receiver signature of "R" Block (optional).

FIGURE 2 - Generic Case Structure

FIGURE 3 - Pervasive Commerce Case Layout

Case

Product Data			Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)		
ME Public Key Version	Case Version (Template)	Distributor Public Key			
Case ID	Case SubID	Product Data Signature (ME)			

Distributor Data			Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc)		
Encrypted [Distributor Price]	Product selectable features	Sales Associate Public Key			
Distributor Comments	Mutations	Distributor Data Signature			

Sales Associate		Sales Associate Comments		Consumer Public Key	
Retail Price	Sales Associate ID	Sales Associate Data Signature			

Consumer		Consumer Comments		Consumer Password (encrypted)	
Consumer ID	Product Feature Selections	Consumer Data Signature			
Consumer Account Name	Local Purchase Time/Date	Purchase Price			
Credit Card selection	Billing Address selection				

The diagram illustrates the layout of a Pervasive Commerce Case, organized into four main sections: Product Data, Distributor Data, Sales Associate, and Consumer. Each section contains specific data fields and signature areas, with arrows indicating the flow of data and signatures between them.

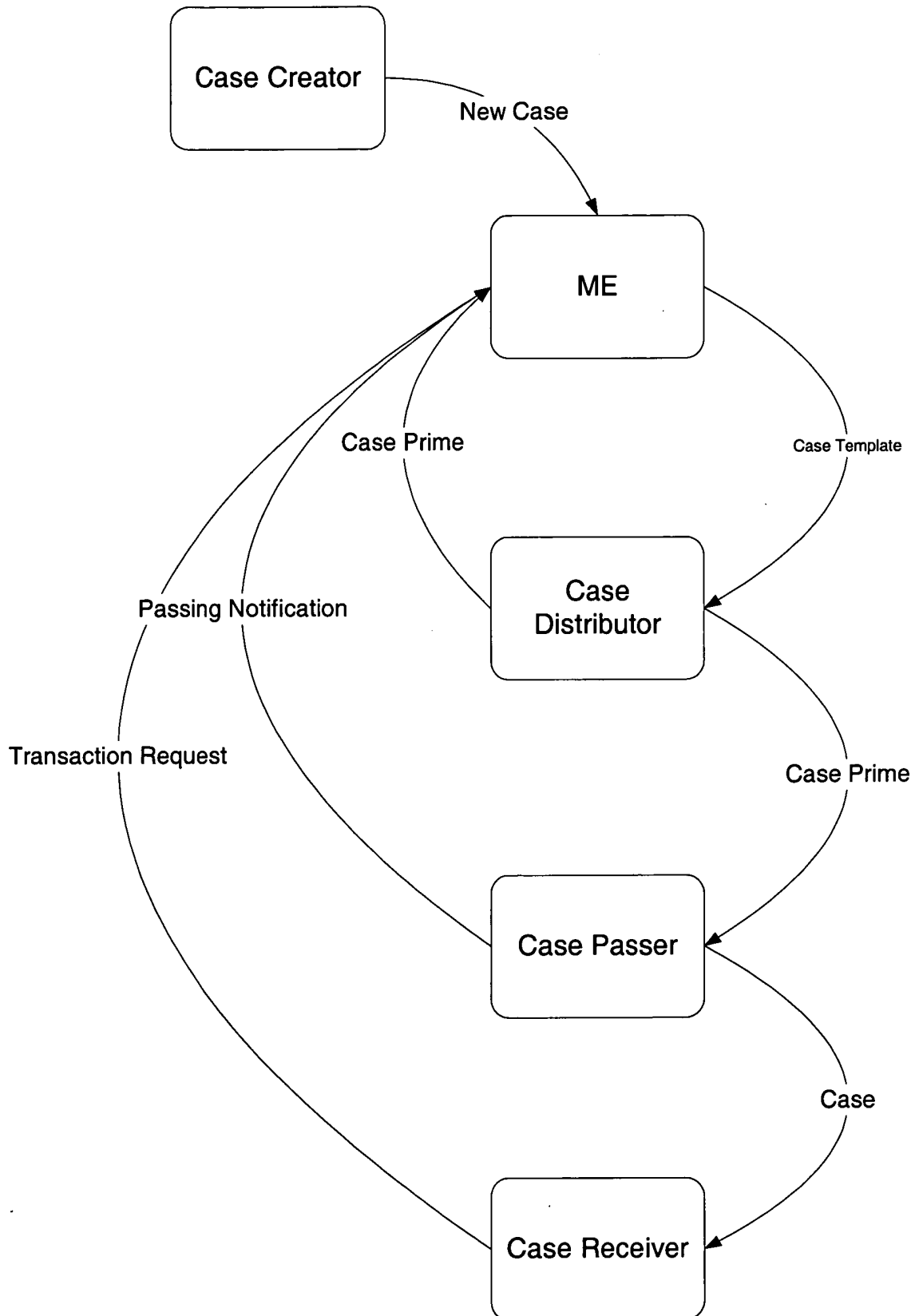
- Product Data:** Includes fields for Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc), ME Public Key Version, Case Version (Template), Distributor Public Key, Case ID, Case SubID, and Product Data Signature (ME).
- Distributor Data:** Includes fields for Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc), Encrypted [Distributor Price], Product selectable features, Sales Associate Public Key, Distributor Comments, Mutations, and Distributor Data Signature.
- Sales Associate:** Includes fields for Sales Associate Comments, Consumer Public Key, Retail Price, Sales Associate ID, and Sales Associate Data Signature.
- Consumer:** Includes fields for Consumer Comments, Consumer Password (encrypted), Consumer ID, Product Feature Selections, Consumer Data Signature, Consumer Account Name, Local Purchase Time/Date, Purchase Price, Credit Card selection, and Billing Address selection.

Arrows indicate the flow of data and signatures between the sections:

- An arrow points from the **Distributor Public Key** field in the Product Data section to the **Sales Associate Public Key** field in the Distributor Data section.
- An arrow points from the **Distributor Data Signature** field in the Distributor Data section to the **Sales Associate Data Signature** field in the Sales Associate section.
- An arrow points from the **Sales Associate Data Signature** field in the Sales Associate section to the **Consumer Data Signature** field in the Consumer section.

FIGURE 3 - Pervasive Commerce Case Layout

FIGURE 4 – Generic Case Flow



106050" 06E25850

FIGURE 5 - New Case Template Layout

Case		
Item Data		
Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)		
ME Public Key Version	Case Version (Template)	Distributor Public Key
Case ID	Case SubID	Product Data Signature (ME)
Dynamic Data		
Product Feature Selection Choices		

FIGURE 6 - Case Prime Layout

Case		
Item Data		
Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)		
ME Public Key Version	Case Version (Template)	Distributor Public Key
Case ID	Case SubID	Product Data Signature (ME)
Digital Object(s)		
	Object Data	Digital Object Signature (ME)
Distributor Data		
Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc)		
Encrypted [Distributor Price]	Product selectable features	Sales Associate Public Key
Distributor Comments	Mutations	Distributor Data Signature
Dynamic Data		
Distributor Price		

FIGURE 7 - Passed Case Layout

Case		
Item Data	Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)	
ME Public Key Version	Case Version (Template)	Distributor Public Key
Case ID	Case SubID	Product Data Signature (ME)
Digital Object(s)	Object Data	Digital Object Signature (ME)
Distributor Data	Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc)	
Encrypted [Distributor Price]	Product selectable features	Sales Associate #1 Public Key
Distributor Comments	Mutations	Distributor Data Signature
Passer (Sales Associate) Data	Sales Associate Comments	Consumer Public Key
Encrypted [Sales Associate Price]	Sales Associate ID	Sales Associate Data Signature
Dynamic Data	Sales Associate Price	

FIGURE 9 - Consumer Synchronization of PDA with ME

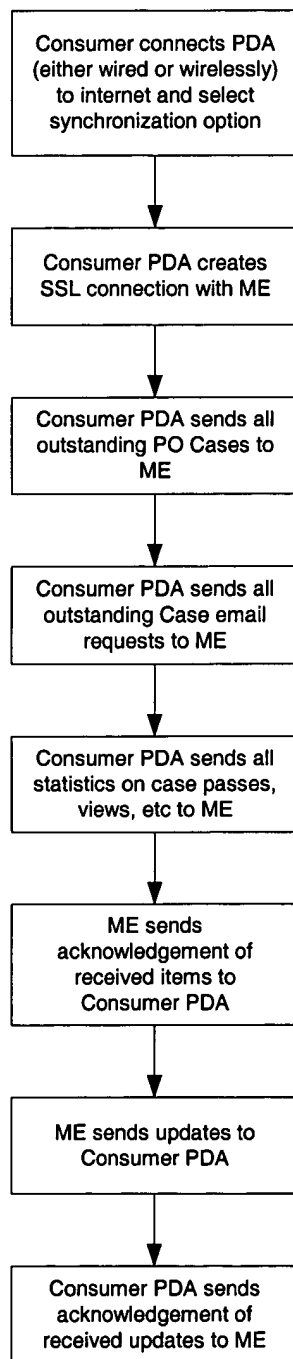


FIG 9-0623260

FIGURE 10 - Consumer Makes Case-Based Purchase

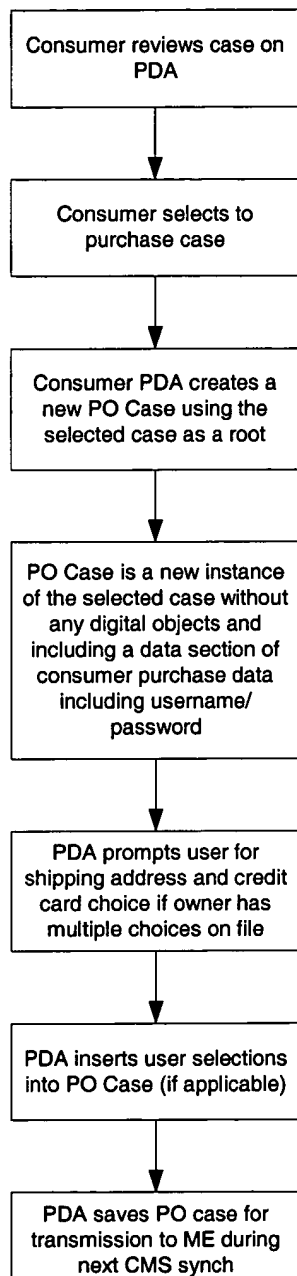


FIG 10-050-0625860

FIGURE 11 - Purchase Request Case Layout

Case

Product Data		
Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)		
ME Public Key Version	Case Version (Template)	Distributor Public Key
Case ID	Case SubID	Product Data Signature (ME)

Distributor Data		
Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc)		
Encrypted [Distributor Price]	Product selectable features	Sales Associate Public Key
Distributor Comments	Mutations	Distributor Data Signature

Sales Associate		
	Sales Associate Comments	Consumer Public Key
Retail Price	Sales Associate ID	Sales Associate Data Signature

Consumer		
	Consumer Comments	Consumer Password (encrypted)
Consumer ID	Product Feature Selections	Consumer Data Signature
Consumer Account Name	Local Purchase Time/Date	Purchase Price
Credit Card selection	Billing Address selection	

The diagram illustrates the flow of data signatures between the four main sections of the Purchase Request Case Layout. Arrows indicate the following sequence: 1. From 'Product Data Signature (ME)' to 'Distributor Data Signature'. 2. From 'Distributor Data Signature' to 'Sales Associate Data Signature'. 3. From 'Sales Associate Data Signature' to 'Consumer Data Signature'. This sequence suggests a chain of authentication or verification where each party's data is signed and passed to the next entity in the process.

FIGURE 11 - Purchase Request Case Layout

FIGURE 12 - Sales Associate Passes Case to Sales Associate

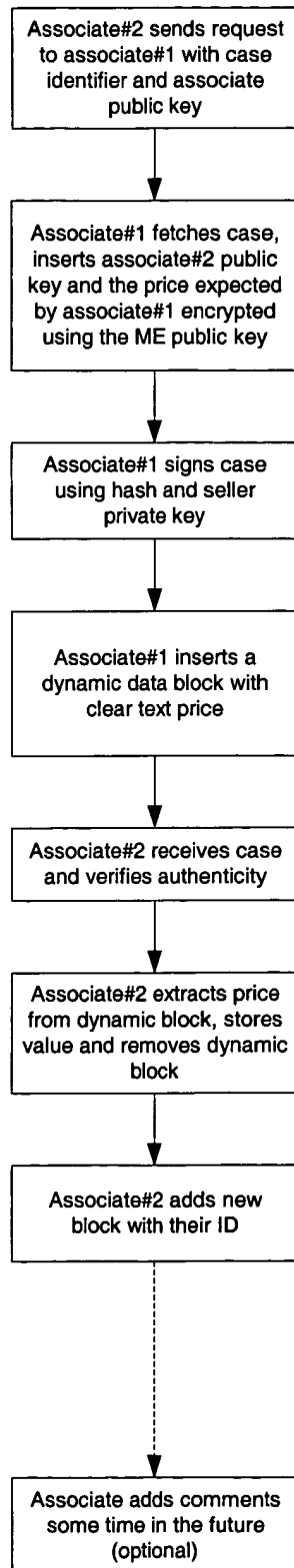


FIG. 12

FIGURE 13 - Sales Associate Passes Case to Consumer

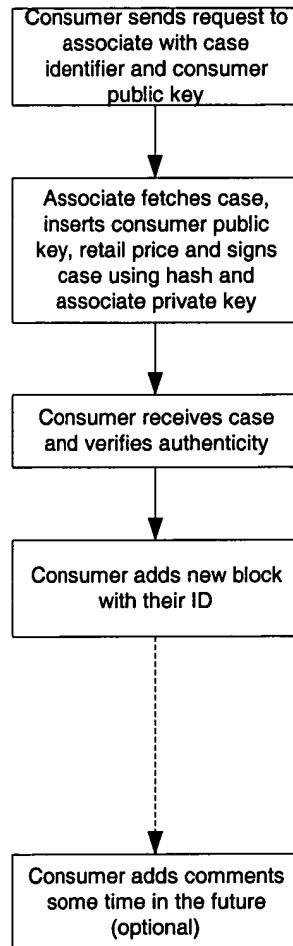
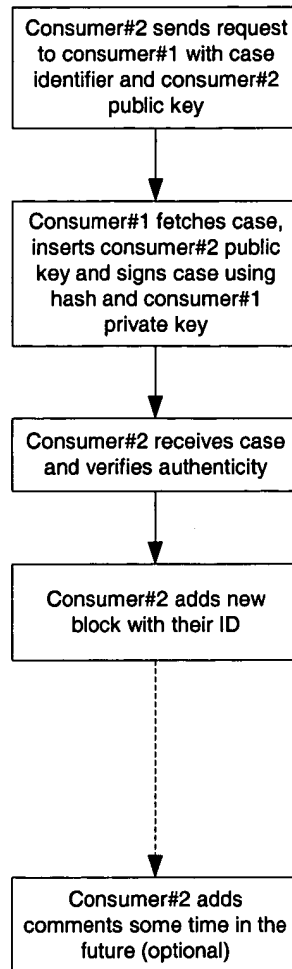


FIGURE 13 - Sales Associate Passes Case to Consumer

FIGURE 14 - Consumer Passes Case to Consumer



FOIA b 5 - DECLASS

FIGURE 15 - Pervasive Commerce Case Layout

Case

Product Data		
Product Data (product name & description, manufacturer name, address, phone, URL, MSRP, etc)		
ME Public Key Version	Case Version (Template)	Distributor Public Key
Case ID	Case SubID	Product Data Signature (ME)

Digital Object(s)		
Object Encoding	Object Size	
Object Description	Object (image, music, digital asset...)	Digital Object Signature (ME)

Distributor Data		
Distributor Info (name, address, phone, URL, promotion, start date, stop date, etc)		
Encrypted [Distributor Price]	Product selectable features	Sales Associate #1 Public Key
Distributor Comments	Mutations	Distributor Data Signature

Sales Associate #1 Data		
Sales Associate Comments	Sales Associate #2 Public Key	
Encrypted [Sales Associate #1 Price]	Sales Associate #1 ID	Sales Associate #1 Data Signature

Sales Associate #2 Data		
Sales Associate Comments	Customer #1 Public Key	
Sales Associate #2 ID	Retail Price	Sales Associate #2 DataSignature

Customer #1 Data		
Customer Comments	Customer #2 Public Key	
Customer #1 ID	Customer #1 Data Signature	

Customer #2 Data		
Customer Comments	Customer #3 Public Key	
Customer #2 ID	Customer #2 Data Signature	

FOIA b 7 - DEX 2560

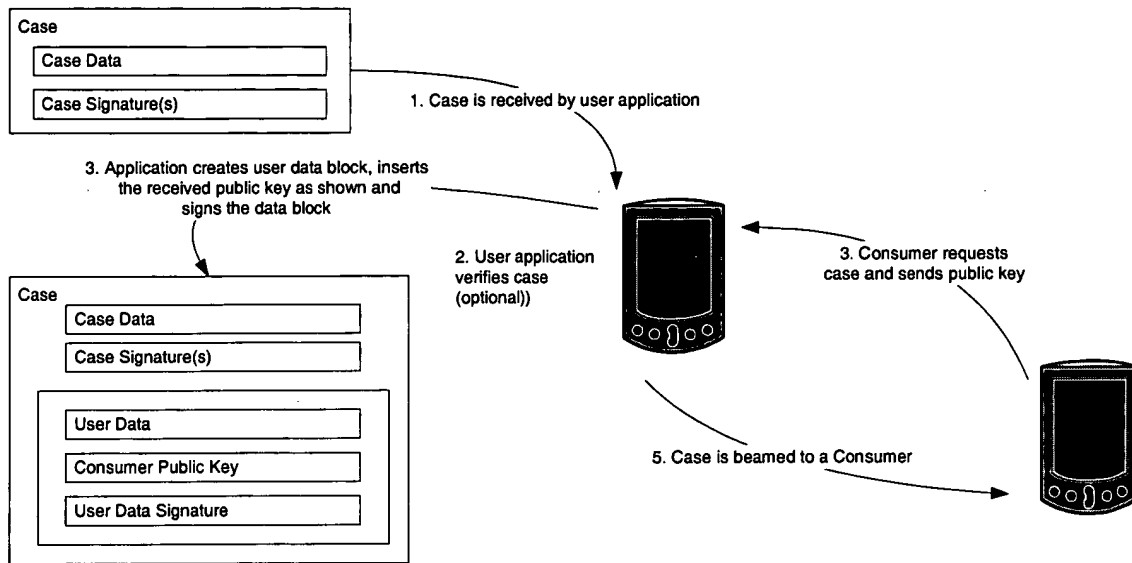


FIGURE 16 – Receiver Selected Key Exchange

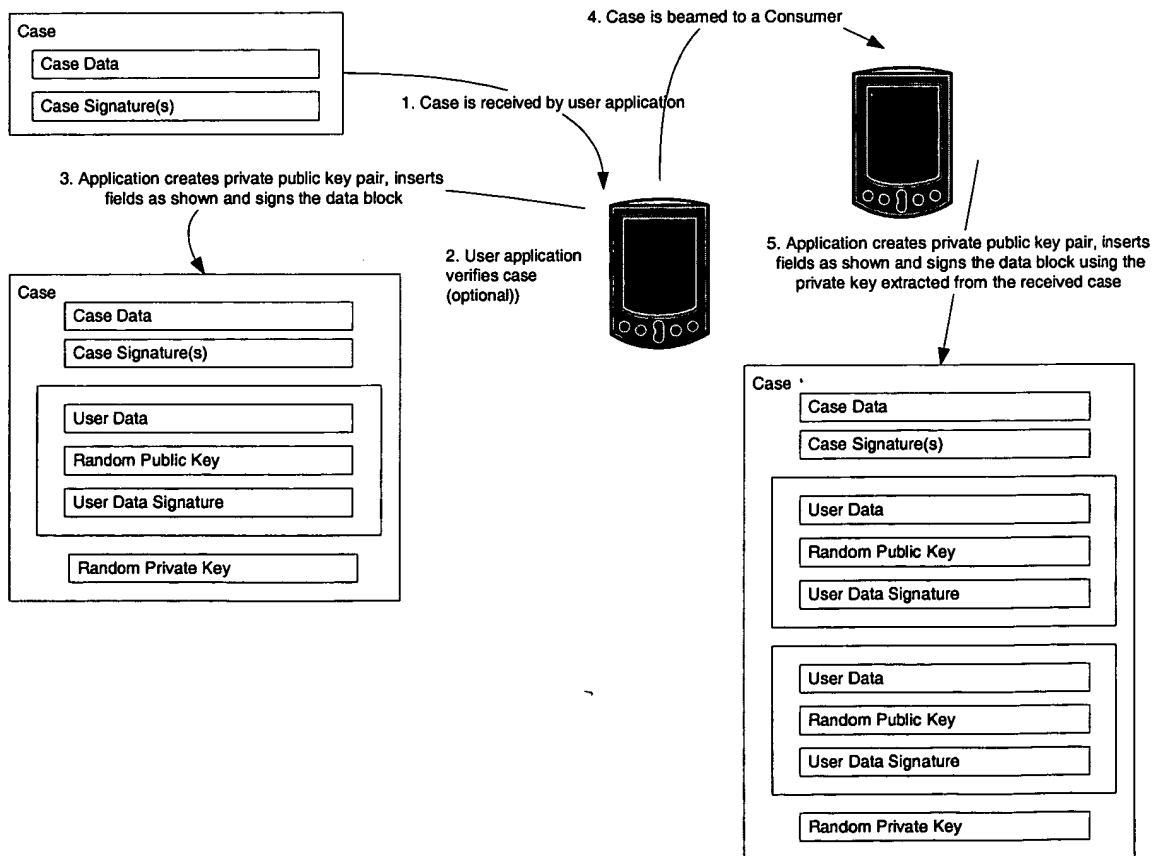


FIGURE 17 – Passer Generated Key Exchange

FOR OFFICIAL USE ONLY

Digital Object
Object Description (text name and description of the contained digital object)
Object Type (image, video, music clip, music song, music album)
Object Encoding (jpeg, tiff, mpeg, mp3, midi, XrML, zip, pdf)
Object Size (total size of object in bytes)
Object (actual object data)
Digital Object Signature (ME)

FIGURE 18 – DIGITAL OBJECT

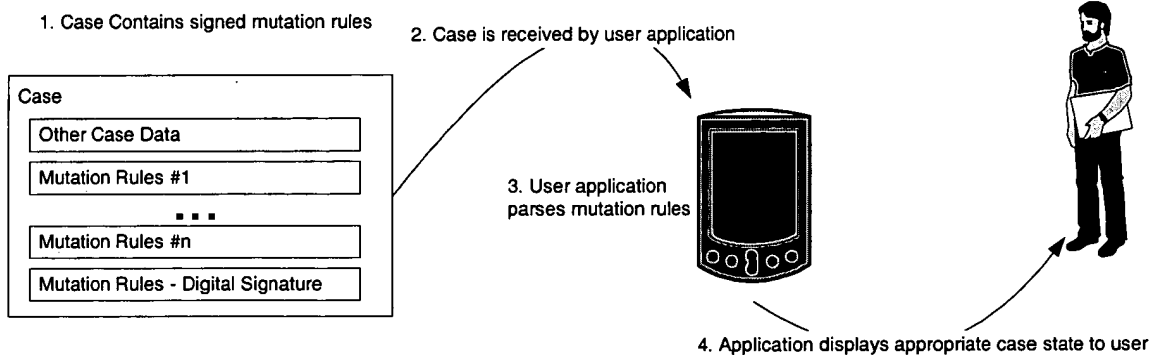


FIGURE 19 – Trusted Case Mutation

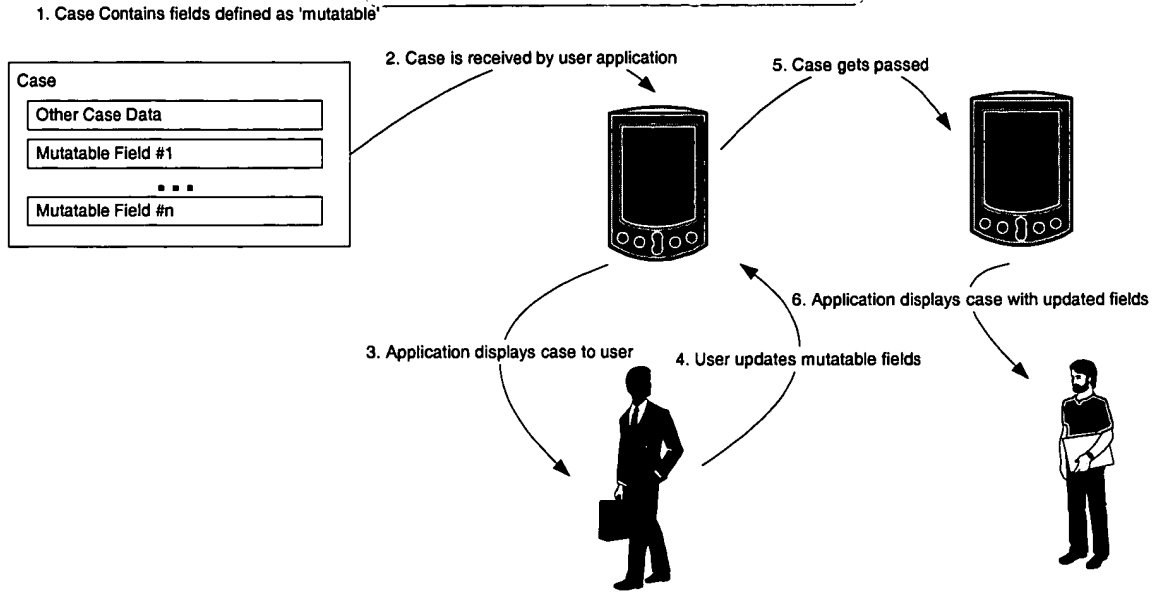


FIGURE 20 – Untrusted Case Mutation

FIG. 20 - Untrusted Case Mutation